L Number	Hits	Search Text	DB	Time stamp
2	24	(US-6397219-$ or US-6466940-$ or US-6560616-$ or US-6374241-$ or US-6289382-$ or US-6249844-$ or US-6237031-$ or US-5970490-$ or US-5528491-$ or US-5651095-$ or US-6584480-$ or US-6230173-$ or US-6115686-$ or US-6631379-$).did. or (US-20020038320-$ or US-20020198974-$ or US-20020120685-$ or US-20020143819-$ or US-20030037069-$ or US-20030028364-$ or US-20020120652-$ or US-20020120780-$ or US-20020069157-$ or US-20020073399-$).did.	USPAT; US-PGPUB	2004/04/12 14:12
3	24	((US-6397219-$ or US-6466940-$ or US-6560616-$ or US-6374241-$ or US-6289382-$ or US-6249844-$ or US-6237031-$ or US-5970490-$ or US-5528491-$ or US-5651095-$ or US-6584480-$ or US-6230173-$ or US-6115686-$ or US-6631379-$).did. or (US-20020038320-$ or US-20020198974-$ or US-20020120685-$ or US-20020143819-$ or US-20030037069-$ or US-20030028364-$ or US-20020120652-$ or US-20020120780-$ or US-20020069157-$ or US-20020073399-$).did.) and pars$3	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/04/12 14:12
4	21	(((US-6397219-$ or US-6466940-$ or US-6560616-$ or US-6374241-$ or US-6289382-$ or US-6249844-$ or US-6237031-$ or US-5970490-$ or US-5528491-$ or US-5651095-$ or US-6584480-$ or US-6230173-$ or US-6115686-$ or US-6631379-$).did. or (US-20020038320-$ or US-20020198974-$ or US-20020120685-$ or US-20020143819-$ or US-20030037069-$ or US-20030028364-$ or US-20020120652-$ or US-20020120780-$ or US-20020069157-$ or US-20020073399-$).did.) and pars$3) and markup	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/04/12 14:12
5	16	((((US-6397219-$ or US-6466940-$ or US-6560616-$ or US-6374241-$ or US-6289382-$ or US-6249844-$ or US-6237031-$ or US-5970490-$ or US-5528491-$ or US-5651095-$ or US-6584480-$ or US-6230173-$ or US-6115686-$ or US-6631379-$).did. or (US-20020038320-$ or US-20020198974-$ or US-20020120685-$ or US-20020143819-$ or US-20030037069-$ or US-20030028364-$ or US-20020120652-$ or US-20020120780-$ or US-20020069157-$ or US-20020073399-$).did.) and pars$3) and markup) and XML	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/04/12 14:26
6	616	two with parser	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/04/12 14:26
7	258	two near4 parser	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/04/12 14:26
8	10317	"17" and XML	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/04/12 14:26
9	63	(two near4 parser) and XML	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/04/12 14:26

10	0	((two near4 parser) and XML) and (fast or quick light) with pars$3	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/04/12 14:27
11	17	(two near4 parser) and (fast or quick light) with pars$3	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/04/12 14:28
12	4	((two near4 parser) and XML) and (fast$3 or quick$3 light$3) with pars$3	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/04/12 14:28
13	0	((two near4 parser) and (fast or quick light) with pars$3) and (((two near4 parser) and XML) and (fast$3 or quick$3 light$3) with pars$3)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/04/12 14:28
14	21	((two near4 parser) and (fast or quick light) with pars$3) or (((two near4 parser) and XML) and (fast$3 or quick$3 light$3) with pars$3)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/04/12 14:39
15	124	(first and second) with portion with pars$3	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/04/12 14:40
16	13	((first and second) with portion with pars$3) and XML	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/04/12 14:40
-	56636	pars$5	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/21 10:20
-	47	pars$5 and hybrid with pars$4	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/20 13:17
-	2	(pars$5 and hybrid with pars$4) and XML	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/20 13:21
-	3	(pars$5 and ((heavy$7 and light$7) with pars$4)) and XML	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/20 13:33
-	10	pars$4 with heavy and pars$4 with light	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/20 15:02
-	407	pars$4 with markup adj languag$3	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/20 15:02
-	410	pars$4 with markup near4 languag$3	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/20 15:09

-	112	(pars$4 with markup near4 languag$3) and (process or interpret) with file	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/20 15:10
-	88	((pars$4 with markup near4 languag$3) and (process or interpret) with file) and portion	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/20 15:13
-	4	(((pars$4 with markup near4 languag$3) and (process or interpret) with file) and portion) and concurrent	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/20 15:10
-	34	(((pars$4 with markup near4 languag$3) and (process or interpret) with file) and portion) and ("715" "707")	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/20 15:23
-	410	markup with language with pars$4	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/20 15:23
-	48	(markup with language with pars$4) and thread	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/20 15:24
-	173556	light and heavy	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/20 15:23
-	0	light and heavy and ((markup with language with pars$4) and thread)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/20 15:24
-	71	(markup with language with pars$4) and stack	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/20 15:24
-	25	((markup with language with pars$4) and thread) and stack	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/20 15:27
-	0	6631379.URPN.	USPAT	2003/10/20 15:26
-	6	("5764916" | "5778378" | "6012098" | "6083276" | "6125391" | "6457018" | "2002/0065957" | "2002/0112058").PN.	USPAT	2003/10/20 15:26
-	121	SAX and XML	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/20 15:27
-	112	(SAX and XML) and pars$4	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/20 15:27
-	27	((SAX and XML) and pars$4) and stack	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/20 15:29

-	47	(SAX and XML) and speed	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/20 15:29
-	9	(SAX and XML) and speed with par$4	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/20 15:41
-	1606	pars$3 with engine	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/20 15:42
-	751	(pars$3 with engine) and mode	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/20 15:42
-	1260	XML with pars$3	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/20 15:42
-	86	(XML with pars$3) and ((pars$3 with engine) and mode)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/20 15:42
-	5	((XML with pars$3) and ((pars$3 with engine) and mode)) and (transition or change or alter) with mode	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/20 15:47
-	13	XML with (engine or pars$3) with mode	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/20 15:48
-	1263	(more that multiple two) with parser	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/21 10:20
-	730	(pluarl$3 "more than one" multipl$3 two) with parser$2	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/21 10:21
-	158	((pluarl$3 "more than one" multipl$3 two) with parser$2) and markup with language	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/21 10:21
-	969	event with pars$3	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/23 10:45
-	201	(event with pars$3) and markup with language	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/23 11:15
-	7	((event with pars$3) and markup with language) and (queue or stack) with tag	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/23 11:16

-	7	((event with pars$3) and markup with language) and (queu$4 or stack$4) with tag$2	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/23 11:18
-	13	((event with pars$3) and markup with language) and (two or multiple or plural) near5 (parser interpreter)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/23 11:22
-	43	(heavyweight and lightweight) with (process$3 function$3 or task$3)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/23 11:23
-	3	((heavyweight and lightweight) with (process$3 function$3 or task$3)) and markup near3 language	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/23 11:25
-	728	task$2 with pars$3	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/23 11:25
-	73	(task$2 with pars$3) and (distribute or divide or split) with task$3	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/23 11:25
-	3	((task$2 with pars$3) and (distribute or divide or split) with task$3) and markup near3 language	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/23 11:40
-	2	((heavyweight or (high adj perfromance high-perfromance)) and (surface or lightweight) with pars$3)and markup near3 language	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/23 11:47
-	0	(high near2 performance and memory near2 conservative) with pars$4	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/23 11:48
-	0	(high near2 performance and memory near2 conservative) same pars$4	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/23 11:48
-	0	(high near2 performance and memory near2 conservative) and pars$4	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/23 11:49
-	4161	(high near2 performance) and pars$4	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/23 11:49
-	541	((high near2 performance) and pars$4) and markup	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/23 11:49
-	2794	((high near2 performance) and pars$4) and speed	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/23 11:49

-	428	(((high near2 performance) and pars$4) and markup) and speed	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/23 11:49
-	3	((((high near2 performance) and pars$4) and markup) and speed) and (surface or quick$3 fast$3 light$6) with pars$4	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/23 11:50
-	39216	(change or transition) with event	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/23 12:45
-	385	(event with pars$3) and ((change or transition) with event)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/23 12:45
-	74	((event with pars$3) and ((change or transition) with event)) and markup near3 language	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/23 12:51
-	68	(multiple or plurlal) near4 (thread or processor engine) with pars$3	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/23 12:52
-	17	((multiple or plurlal) near4 (thread or processor engine) with pars$3) and markup near4 language	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/23 12:55
-	4552	(region or portion or part) with pars$3	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/23 12:56
-	679	((region or portion or part) with pars$3) and markup near4 language	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/23 12:56
-	70	(((region or portion or part) with pars$3) and markup near4 language) and ((high near2 performance) heavyweight heavy near2 weight)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/23 12:57
-	8	((((region or portion or part) with pars$3) and markup near4 language) and ((high near2 performance) heavyweight heavy near2 weight)) and (event with pars$3)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/23 12:57
-	24	(US-6397219-$ or US-6466940-$ or US-6560616-$ or US-6374241-$ or US-6289382-$ or US-6249844-$ or US-6237031-$ or US-5970490-$ or US-6631379-$ or US-5651095-$ or US-5528491-$ or US-6584480-$ or US-6115686-$ or US-6230173-$).did. or (US-20020038320-$ or US-20020198974-$ or US-20020143819-$ or US-20020120685-$ or US-20030037069-$ or US-20030028364-$ or US-20020120652-$ or US-20020120780-$ or US-20020073399-$ or US-20020069157-$).did.	USPAT; US-PGPUB	2003/10/23 16:09

-	1	((US-6397219-$ or US-6466940-$ or US-6560616-$ or US-6374241-$ or US-6289382-$ or US-6249844-$ or US-6237031-$ or US-5970490-$ or US-6631379-$ or US-5651095-$ or US-5528491-$ or US-6584480-$ or US-6115686-$ or US-6230173-$).did. or (US-20020038320-$ or US-20020198974-$ or US-20020143819-$ or US-20020120685-$ or US-20030037069-$ or US-20030028364-$ or US-20020120652-$ or US-20020120780-$ or US-20020073399-$ or US-20020069157-$).did.) and (stack or queue list) near4 event	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/23 16:12
-	5	((US-6397219-$ or US-6466940-$ or US-6560616-$ or US-6374241-$ or US-6289382-$ or US-6249844-$ or US-6237031-$ or US-5970490-$ or US-6631379-$ or US-5651095-$ or US-5528491-$ or US-6584480-$ or US-6115686-$ or US-6230173-$).did. or (US-20020038320-$ or US-20020198974-$ or US-20020143819-$ or US-20020120685-$ or US-20030037069-$ or US-20030028364-$ or US-20020120652-$ or US-20020120780-$ or US-20020073399-$ or US-20020069157-$).did.) and (stack or queue list) near4 tag	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/27 07:41
-	0	(2002/0073399).CCLS.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/27 07:42
-	2	("20020073399").PN.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/27 07:42
-	0	("2and(delet$3orremov$3)near5tag").PN.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/27 07:43
-	0	(("20020073399").PN.) and (delet$3 remov$3) near5 tag	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/27 07:43

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Set     Items   Descripti
S1    1168314   PARSE? OR PARSING OR BREAKOUT OR BREAK()OUT OR SEPARAT? OR
           FRAGMENT? OR CHUNK?
S2       7793   (MARKUP OR XML OR (MARKUP OR MARK()UP)()LANGUAGE? OR HTML -
           OR HTTP OR SGML OR PXML OR PHTML OR PHTTP OR PSGML OR LXML OR
           NXML OR HTML OR SGML OR XHTML OR DHTML OR VRML)(2N)(FILE OR I-
           NFORMATION OR DATA)
S3    1664955   FIRST OR 1ST OR PRIME OR PRIMARY OR INITIAL OR MAIN OR ORI-
           GINAL
S4     330575   S3 (3N) (PORTION? OR PART? OR SECTION OR SEGMENT? OR SLICE?
            OR PIECE? OR PASS OR CUT?)
S5          7   (LIGHTWEIGHT OR S7)(2N)PARSER?
S6    1313468   PERFORM? OR CARRY??? OR EXECUT? OR DISCHARG? OR OPERATE? OR
            WORK? OR EXERCISE? OR FUNCTION?
S7          0   S5 (2N)(TASK? OR FUNCTION? OR ROLE? OR ASSIGNMENT? OR CHOR-
           E? OR DUTY OR DUTIES OR JOB OR JOBS)
S8    1037118   SECOND OR 2ND
S9     227072   S8 (3N) (PORTION? OR PART? OR SECTION OR SEGMENT? OR SLICE?
            OR PIECE? OR PASS OR CUT?)
S10        78   (HEAVY OR HEAVYWEIGHT OR MAJOR OR S8)(2N) PARSER?
S11    982441   SET? OR COLLECTION? OR CATEGOR? OR CLASS? ? OR CLASSIFICAT-
           ION
S12    510221   SUBSET OR MEMBER? OR CONTAIN(2W) SET
S13   1464335   TRANSITION? OR CHANGE OR CHANGING OR PASSAGE OR SHIFT? OR -
           TRANSIT? OR CHANGE?
S14        65   S1 (S) S2 (S) S4
S15        35   S1 (S) S2 (S) S9
S16        27   S14 AND S15
S17       308   S6 (S) (S3 (3N) S11) (S) (S1 (2N)(TASK? OR FUNCTION? OR RO-
           LE? OR ASSIGNMENT? OR CHORE? OR DUTY OR DUTIES))
S18       197   S6 (S) (S8 (3N) S11) (S) (S1 (2N)(TASK? OR FUNCTION? OR RO-
           LE? OR ASSIGNMENT? OR CHORE? OR DUTY OR DUTIES))
S19      4280   (S3 (3N) S11) (S) S12 (S) (S8 (3N) S11)
S20         8   S14 AND S18
S21        10   S14 AND S19
S22        21   S13 (S) S14 (S) S15
S23        99   S17 (S) S18
S24        94   S23 (S) S1
S25         4   S24 (S) S2
S26       121   S20 OR S21 OR S22 OR S24 OR S25
S27        41   S26 AND IC=G06F?
File 348:EUROPEAN PATENTS 1978-2004/Mar W04
        (c) 2004 European Patent Office
File 349:PCT FULLTEXT 1979-2002/UB=20040401,UT=20040325
        (c) 2004 WIPO/Univentio
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Set     Items   Description
S1    1205464   PARSE? OR PARSING OR BREAKOUT OR BREAK()OUT OR SEPARAT? OR
            FRAGMENT? OR CHUNK?
S2       5348   (MARKUP OR XML OR (MARKUP OR MARK()UP)()LANGUAGE? OR HTML -
            OR HTTP OR SGML OR PXML OR PHTML OR PHTTP OR PSGML OR LXML OR
            NXML OR HTML OR SGML OR XHTML OR DHTML OR VRML)(2N)(FILE OR I-
            NFORMATION OR DATA)
S3    3912063   FIRST OR 1ST OR PRIME OR PRIMARY OR INITIAL OR MAIN OR ORI-
            GINAL
S4    5375354   PORTION? OR PART? OR SECTION OR SEGMENT? OR SLICE? OR PIEC-
            E? OR PASS OR CUT
S5        102   (LIGHTWEIGHT OR S3)(2N)PARSER?
S6    7891310   PERFORM? OR CARRY??? OR EXECUT? OR DISCHARG? OR OPERATE? OR
             WORK? OR EXERCISE? OR FUNCTION?
S7      13191   S1 (2N)(TASK? OR FUNCTION? OR ROLE? OR ASSIGNMENT? OR CHOR-
            E?.OR DUTY OR DUTIES OR JOB OR JOBS)
S8    1125719   SECOND OR 2ND
S9         12   (HEAVY OR HEAVYWEIGHT OR MAJOR OR S8)(2N)PARSER?
S10   4230434   SET? OR COLLECTION? OR CATEGOR? OR CLASS? ? OR CLASSIFICAT-
            ION OR ORDER
S11    349216   SUBSET OR MEMBER? OR CONTAIN(2W)SET
S12   2716038   TRANSITION? OR CHANGE OR CHANGING OR PASSAGE OR SHIFT? OR -
            TRANSIT? OR CHANGE
S13          2   S1 AND S2 AND (S3 (3N) S4)
S14      10137   S1 AND (S3 (3N) S4)
S15          1   S1 AND S2 AND (S8 (3N) S4)
S16          1   S13 AND S15
S17       4683   S1 AND (S8 (3N) S4)
S18        190   S6 AND (S3 (3N) S10) AND S7
S19        127   S6 AND (S8 (3N) S10) AND S7
S20        624   (S3 (3N) S10) AND S11 AND (S8 (3N) S10)
S21          0   S5 AND S9
S22         30   S18 AND S19
S23          0   S20 AND S21
S24          1   S14 AND S15
S25       2471   S14 AND S17
S26          0   S25 AND S5
S27          1   S25 AND S9
S28          1   S25 AND S18
S29          0   S25 AND S19
S30          4   S25 AND S20
S31          6   S14 AND S20
S32          7   S17 AND S20
S33         42   S13 OR S15 OR S16 OR S22 OR S24 OR S27 OR S28 OR S30 OR S31
              OR S32
S34         37   S33 NOT PY>2001
S35         37   S34 NOT PD>20010725
S36         32   RD (unique items)
File   8:Ei Compendex(R) 1970-2004/Mar W4
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File  94:JICST-EPlus 1985-2004/Mar W3
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File  99:Wilson Appl. Sci & Tech Abs 1983-2004/Feb
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File  95:TEME-Technology & Management 1989-2004/Mar W3
         (c) 2004 FIZ TECHNIK
File 583:Gale Group Globalbase(TM) 1986-2002/Dec 13
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36/5/1 (Item 1 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

04354629 E.I. No: EIP96033062882
Title: High-order contrasts for self-adaptive source separation
Author: Moreau, Eric; Macchi, Odile
Corporate Source: Cent Natl de la Recherche Scientifique-Supelec, Gif sur Yvette, Fr
Source: International Journal of Adaptive Control and Signal Processing v 10 n 1 Jan-Feb 1996. p 19-46
Publication Year: 1996
CODEN: IACPED ISSN: 0890-6327
Language: English
Document Type: JA; (Journal Article) Treatment: T; (Theoretical)
Journal Announcement: 9604W4
Abstract: This paper is concerned with the problem of separating independent non-Gaussian sources. This is done by adaptively maximizing a contrast **function** based on fourth-order cumulants of the (mixed) observations. The **first class** of solutions involves a first stage where the signal vector is adaptively whitened. In order to implement in the second stage the proper **separating task** , new contrast **functions** are proposed, especially when all the source kurtosises have the same sign. These contrasts involve only self-cumulants of the outputs. The **second class** of solutions requires a single separating stage. However, the associated contrasts involve cross-cumulants in addition to self-cumulants. They essentially apply to correlated vectors with normalized powers (rather than to white vectors). The resulting adaptive one-stage and two-stage systems achieve satisfactory separation **performance** independently of the statistics of sources and of the kind of linear mixture. (Author abstract) 30 Refs.
Descriptors: *Self adjusting control systems; Adaptive algorithms; Vectors; Adaptive filtering
Identifiers: Self adaptive source separation; Fourth order cumulants; Kurtosis; Contrast **functions** ; Prewhitening
Classification Codes:
731.1 (Control Systems); 921.1 (Algebra); 716.1 (Information & Communication Theory)
731 (Automatic Control Principles); 921 (Applied Mathematics); 716 (Radar, Radio & TV Electronic Equipment)
73 (CONTROL ENGINEERING); 92 (ENGINEERING MATHEMATICS); 71 (ELECTRONICS & COMMUNICATIONS)

36/5/2 (Item 2 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

04343094 E.I. No: EIP96023023410
Title: Pandemonium system of reflective agents
Author: Smieja, Frank
Corporate Source: Schloss Birlinghoven, Sankt Augustin, Ger
Source: IEEE Transactions on Neural Networks v 7 n 1 Jan 1996. p 97-106
Publication Year: 1996
CODEN: ITNNEP ISSN: 1045-9227
Language: English
Document Type: JA; (Journal Article) Treatment: T; (Theoretical)
Journal Announcement: 9604W1
Abstract: The Pandemonium system of reflective MINOS agents solves problems by automatic dynamic modularization of the input space. The agents contain feedforward neural networks which adapt using the backpropagation algorithm. We demonstrate the **performance** of Pandemonium on various categories of problems. These include learning continuous **functions** with discontinuities, **separating** two spirals, learning the parity **function** , and optical character recognition. It is shown how strongly the advantages gained from using a modularization technique depend on the nature of the problem. The superiority of the Pandemonium method over a single net on the

first two test **categories** is contrasted with its limited advantages for the **second** two **categories** . In the **first** case the system converges quicker with modularization and is seen to lead to simpler solutions. For the second case the problem is not significantly simplified through flat decomposition of the input space, although convergence is still quicker. (Author abstract) 20 Refs.

Descriptors: Pattern recognition systems; Feedforward neural networks; Backpropagation; Algorithms; Problem solving; Learning systems; Optical character recognition; Boolean **functions** ; Parallel processing systems

Identifiers: Pandemonium systems; Reflective MINOS agents; Automatic modularization; Parity **function** ; Input space

Classification Codes:

723.4 (Artificial Intelligence); 723.5 (Computer Applications); 723.1 (Computer Programming); 741.1 (Light/Optics); 721.1 (Computer Theory, Includes Formal Logic, Automata Theory, Switching Theory, Programming Theory); 722.4 (Digital Computers & Systems)

723 (Computer Software); 741 (Optics & Optical Devices); 721 (Computer Circuits & Logic Elements); 722 (Computer Hardware)

72 (COMPUTERS & DATA PROCESSING); 74 (OPTICAL TECHNOLOGY)

36/5/3 (Item 3 from file: 8)

DIALOG(R)File 8:Ei Compendex(R)

02848540 E.I. Monthly No: EIM9001-002540

Title: Patterns of task interference when human functions **as a controller or a monitor.**

Author: Liu, Yili; Wickens, Christopher D.

Corporate Source: Univ of Illinois, Urbana, IL, USA

Conference Title: Proceedings of the 1988 IEEE International Conference on Systems, Man, and Cybernetics

Conference Location: Beijing/Shenyang, China Conference Date: 19880808

E.I. Conference No.: 12380

Source: Proc 1988 Int Conf Syst Man Cybern v2 (of 2). p 864-867

ISBN: 7-80003-039-3

Language: English

Document Type: PA; (Conference Paper) Treatment: X; (Experimental)

Journal Announcement: 9001

Abstract: The authors report an experiment on the effect of task structure and difficulty on time-sharing **performance** and **workload** in both an automated and a corresponding manual control system. The experimental task involves manual control (**first** - **order** or **second** - **order** tracking) or autopilot monitoring, time-shared with spatial and verbal decision tasks of two levels of difficulty. The results provide evidence that tasks and processes competing for common processing resources are time-shared less effectively and have higher **workload** than **tasks** using **separate** resources. The evidence comes from both manual and automated systems. Implications for system design are discussed. 17 refs.

Descriptors: *CONTROL SYSTEMS--*Human Factors; SYSTEMS SCIENCE AND CYBERNETICS--Man Machine Systems

Identifiers: TASK INTERFERENCE; TASK STRUCTURE; MANUAL CONTROL

Classification Codes:

731 (Automatic Control Principles); 461 (Biotechnology)

73 (CONTROL ENGINEERING); 46 (BIOENGINEERING)

36/5/4 (Item 4 from file: 8)

DIALOG(R)File 8:Ei Compendex(R)

02741635

Title: Effect of disturbance dynamics on optimum control of second order **plus dead time processes.**

Author: Hill, Archibald G.; Kang, Tae-Won

Corporate Source: Univ of Southwestern Louisiana, Lafayette, LA, USA

Conference Title: Improved Plant Performance Through Instrumentation

Technical Papers Composing the Proceedings of the 1988 Spring Conference and Exhibit
Conference Location: Tulsa, OK, USA Conference Date: 19880411
Sponsor: ISA, Chemical & Petroleum Div, Research Triangle Park, NC, USA
E.I. Conference No.: 12054
Source: Instrumentation in the Chemical and Petroleum Industries, Proceedings v 20. Publ by ISA, Research Triangle Pk, NC, USA. p 69-79
Publication Year: 1988
CODEN: INCPAW ISSN: 0074-0551
Language: English
Document Type: PA; (Conference Paper)
Journal Announcement: 8905
Abstract: Computer simulation was used to find optimum PID controller tuning constants for **second order** plus dead time processes. The effect of disturbance dynamics was considered by using **separate** transfer **functions** for the response to the disturbance variable and the manipulated variable. The disturbance was modeled as **first order** and entered the loop at the process output. The criterion of **performance** was taken to be minimum integral of the absolute value of the error (IAE). Normalized tuning constants and IAE values are illustrated graphically. (Author abstract) 13 Refs.
Descriptors: *CONTROL SYSTEMS, OPTIMAL--*Analysis; CONTROL SYSTEMS, PROPORTIONAL; COMPUTER SIMULATION; CONTROL SYSTEMS, THREE TERM
Identifiers: DISTURBANCE DYNAMICS; **SECOND ORDER** PLUS DEAD TIME PROCESSES; PID CONTROLLER; TUNING CONSTANTS
Classification Codes:
731 (Automatic Control Principles); 723 (Computer Software)
73 (CONTROL ENGINEERING); 72 (COMPUTERS & DATA PROCESSING)

36/5/7 (Item 1 from file: 35)
DIALOG(R)File 35:Dissertation Abs Online

01562486 ORDER NO: AAD97-17869
BUILDING BLOCKS FOR A FILTER TUNING SYSTEM USING AN ANALOG VLSI FUZZY LOGIC CONTROLLER
Author: CHOI, SEUNG CHUL
Degree: PH.D.
Year: 1997
Corporate Source/Institution: NEW MEXICO STATE UNIVERSITY (0143)
Chair: JAIME RAMIREZ-ANGULO
Source: VOLUME 58/01-B OF DISSERTATION ABSTRACTS INTERNATIONAL. PAGE 330. 182 PAGES
Descriptors: ENGINEERING, ELECTRONICS AND ELECTRICAL ; PHYSICS, CONDENSED MATTER ; ARTIFICIAL INTELLIGENCE
Descriptor Codes: 0544; 0611; 0800

The coverage of the present research is the analog VLSI implementation of a fuzzy logic controller to tune monolithic filters and the software verification of the overall system to tune these filters. The building blocks of the fuzzy controller for filter tuning include a **membership** function generator, min and max circuits, a **second - order** low **pass** filter using BiCMOS transconductance multipliers, analog multipliers, defuzzifiers, and oscillators. The goal of the hardware implementation is to have good programmability, small silicon area requirements, high speed, and low power. Simulation results of all building blocks are in good agreement with the ideal response and verify the high speed operation of the circuit.

Chip measurement results of three analog multipliers, a voltage-mode defuzzifier, a charge-mode defuzzifier, and a **second - order** low **pass** filter using a transconductance multiplier, were in good agreement with the simulation results. The analog Orbit 2μm low noise N-well MOSIS fabrication technology was used for chip fabrication. The MATLAB implementation for the functional verification of a proposed fuzzy tuning filter system was performed using a simple linear model. The proposed MatLab architecture allows programmable window specifications. A total of

52 rules were used for the fuzzy inference engine based on the results of extensive SPICE simulations of a **second - order** low **pass** filter. In most cases of different **initial** variable **settings**, the fuzzy logic controller converged to the filter window specifications within at most ten iterations.

The proposed fuzzy filter has two possible implementations. In the first implementation the filter system and fuzzy logic processor can be built on the same chip, while in the second implementation the two blocks can be built on **separate** chips. The advantage of the single chip implementation is reliability, but at the expense of silicon area. Suitable applications for the single chip are in mass produced items such as television. In the **separate** chip implementation, one fuzzy logic processor chip can be used to tune any number of filter system chips. In this approach, each filter will be tuned with one chip which will be programmed in advance and a circuit to compensate for temperature variations must be included in each chip.

36/5/10 (Item 4 from file: 35)

01090683 ORDER NO: AAD90-05760
EFFECT OF DISTURBANCE DYNAMICS ON OPTIMUM CONTROL OF SECOND ORDER **PLUS DEAD TIME PROCESS**

Author: KANG, TAE-WON
Degree: PH.D:
Year: 1989
Corporate Source/Institution: OKLAHOMA STATE UNIVERSITY (0664)
ADVISER: A. G. HILL
Source: VOLUME 50/09-B OF DISSERTATION ABSTRACTS INTERNATIONAL.
PAGE 4101. 206 PAGES
Descriptors: ENGINEERING, GENERAL; ENGINEERING, CHEMICAL
Descriptor Codes: 0537; 0542

Scope and method of study. The effect of disturbance dynamics on the proportional-integral-derivative (PID) controller tuning constants (K$\sb{\rm C}$, $\tau\sb{\rm I}$, and $\tau\sb{\rm D}$) was investigated. A digital computer simulation approach has been used to find optimum PID tuning constants for **second order** plus dead time process. Consideration of the **separate** transfer **functions** for the response to the disturbance variable and the manipulated variable was a unique feature of this study. The disturbance was modeled as **first order** and entered the control loop with different dynamics from the process. A control loop was described as a pascal code to be used as the objective **function** for an optimization program based on Rosenbrock technique. The criterion of **performance** was taken to be minimum of integral of absolute value of the error (IAE).

Findings and conclusion. Optimum tuning constants resulted from computer simulation runs were reported graphically. Three tuning constants, IAE, and dynamic parameters of process and disturbance were normalized in dimensionless form for the graphs. Optimum tuning constants were dependent not only process but also disturbance dynamics. Optimum tuning constants were generally tighter for the faster disturbances. IAE decreased as disturbance slowed down, and also as dead time decreased. New tuning method is applicable for $0.0 \leq \theta\sb{\rm d} / \tau\sb{1} \leq 1.0$, and $0.0 \leq \tau\sb3 / \tau\sb1 \leq 7.0$. Sample applications were **performed** with use of the optimum tuning constants. Graphical results were provided showing the time response of the disturbance variable, controlled variable, and the valve signal. New tuning gave relative improvement against Lopez's tuning method. Maximum load fraction was calculated to investigate the effect of disturbance magnitude, where the new tuning constants can be considered to be optimum. Obtained tuning constants were only optimum for small magnitudes of disturbance when the disturbance is fast and this limitation became more important as $\tau\sb2 / \tau\sb1$ increased.

36/5/11 (Item 5 from file: 35)
DIALOG(R)File 35:Dissertation Abs Online

1017767 ORDER NO: AAD88-16211
LEXICAL/PRAGMATIC INFLUENCES IN SENTENCE COMPREHENSION: THE LOCUS OF THE REVERSIBILITY EFFECT

Author: OSTRIN, RUTH KRAMER
Degree: PH.D.
Year: 1988
Corporate Source/Institution: UNIVERSITY OF PENNSYLVANIA (0175)
SUPERVISOR: MYRNA F. SCHWARTZ
Source: VOLUME 49/06-B OF DISSERTATION ABSTRACTS INTERNATIONAL.
PAGE 2401. 164 PAGES
Descriptors: PSYCHOLOGY, EXPERIMENTAL; LANGUAGE, LINGUISTICS
Descriptor Codes: 0623; 0290

Slobin (1966) found that there was only an increase in the difficulty for passive as opposed to active sentences when the sentence was reversible, but not when the sentence could be interpreted on the basis of the major lexical content alone. This finding, in conjunction with similar effects of reversibility on the reading of normal adults and comprehension of aphasics, have led some researchers to question the modularity of sentence parsing. Are sentences mandatorily assigned syntactic structures, or is it possible to proceed directly from lexical access to semantic interpretation? We argue that there is no compelling evidence that the demonstrated effects of reversibility bypass or influence the parsing stage. Instead these lexical/pragmatic effects may **operate** at the post-parsing stage of mapping grammatical **functions** to thematic roles. In order to appropriately characterize the influence of reversibility, we distinguish " **parsing** ", the automatic **assignment** of syntactic structure, from "mapping", the linking of surface grammatical **functions** with their thematic roles.

This set of experiments addresses two questions: are the lexical/pragmatic influences present in other language processing tasks found in the auditory comprehension of normal adults? If so, what is the locus of these effects? In **order** to address the **first** question sentences were constructed that varied both reversibility and syntactic complexity. In **order** to address the **second** question these sentences were "padded" such that the mapping from grammatical **function** to thematic role was not complicated, but the sentences had to be parsed for the reversibility to be relevant. Although it may be possible to isolate the major lexical content of a short sentence without parsing, this is not possible for the longer sentences. If a lexical route to sentence interpretation could be used only for shorter sentences, then the longer sentences should show comparable effects of syntactic complexity for reversible and non-reversible sentences. If there continues to be a distinction between reversible and non-reversible sentences with respect to syntactic complexity when the sentences are padded the effect must occure after the sentences have been parsed.

A semantic anomaly judgment task was not successful in illuminating the effects outlined above. This task appeared more sensitive to semantic interpretive processes than to syntactic complexity. A speeded comprehension task was successful in tapping the processes of interest. It was found that the influence of syntactic complexity did vary as a **function** of reversibility and that this effect persisted even when the sentences were padded. This is evidence that reversibility does not effect the parsing of the sentence, but instead has its influence at the mapping from grammatical **function** to thematic roles.

36/5/12 (Item 6 from file: 35)
DIALOG(R)File 35:Dissertation Abs Online

696585 ORDER NO: AAD80-22369
FUZZY CLUSTERING IN A PARTITIONED KARHUNEN-LOEVE TRANSFORM

DOMAIN-APPLICATION TO CHARACTERIZATION OF MULTIPLE-DIAGNOSIS VCG'S

Author: ZIED, ALI MOHAMED
Degree: PH.D.
Year: 1980
Corporate Source/Institution: THE OHIO STATE UNIVERSITY (0168)
Source: VOLUME 41/04-B OF DISSERTATION ABSTRACTS INTERNATIONAL.
PAGE 1457. 215 PAGES
Descriptors: ENGINEERING, ELECTRONICS AND ELECTRICAL
Descriptor Codes: 0544

Statistical pattern recognition techniques may be applied to cardiograms for automated diagnosis. The three vectorcardiographic signals in the Frank-orthogonal-lead system are expressed as truncated Karhunen-Loeve expansion in terms of a set of time-varying orthogonal basis vectors. These vectors are derived from the **second - order** statistics of the data. In addition to the basic formulation of the algorithm, an elegant proof of its minimizing property is presented.

An ensemble of 670 cardiograms is being used to train the algorithm, and the resulting pattern vectors are clustered in a multidimensional features space. Baseline restoration is first performed on the data using a true third-order spline technique for best Y(t)-estimate of the baseline. Ordinates, Y, in the estimates are directly deducted from the P-Q interval of the waveform. The cardiogram is an ensemble of quasi-stationary processes; this is due to variations in both R-R and P-R intervals. As a feature extractor, the K-L expansion is optimal compared with Fourier-of performed on non-stationary processes. To achieve optimality, the heart is segmented (time partitioned) into two processes, namely the P-wave and QRST segment, and each segment is aligned on its fiducial point. The R-wave fiducial point is detected by searching the magnitude of the vector velocity for maxima. The P-wave fiducials are located via a new multitemplate correlation algorithm.

Two **separate** K-L expansions are performed on each process. An ensemble-global K-L expansion is performed on the P-processes, to compute the P-basis vectors. Further, the ensemble is partitioned (ensemble-partitioning) into three partitions: (1) Gross-abnormal: This is the partition of gross depolarization abnormals in the QRS Complex (LBBB, RBBB, etc). (2) All-But-Gross: This is the partition of all other abnormalities. (3) QRS Suppressed: This is the partition of certain repolarization abnormals and normals (ST, T, etc). A partition-global K-L expansion is then performed on the QRST process in each partition, yielding a set of K-L vectors for each. The underlying concept here is, since the class distribution probabilities are not known apriori, a much more efficient feature extractor would result if the ensemble is partitioned.

In addition, since the K-L expansion is optimal using the least mean square error criteria, and since the PQRST is heavily weighted by the QRS complex (energy wise), and to improve on classification accuracies in the post QRS segment, the waveform is time weighted (or QRS-Suppressed) before computing the partition base functions. This is accomplished by multiplying each time-varying sample of the partition by a weighting function. By suppressing the QRS, the basis vectors best represent repolarization classes.

The approach to the pattern recognition problem is hierarchical: (1) Find a **first - cut classification** of pattern vectors-using ensemble-global K-L expansion. (2) Pursue a much more accurate diagnosis/classification using partition-global K-L expansion.

To completely formulate the classification problem, the structure of the feature space is studied, using a fuzzy clustering algorithm with supervised seeding and class-dependent fuzziness. The underlying concept here is, since classes in the feature space are overlapping to various degrees, parametrization is best estimated using the fuzzy approach. This is an extremely innovative concept (compared with hard-clustering) in handling the following two problems: (1) It allows for slight misclassification errors on part of the Cardiologist (is the diagnosis 100% certain abnormality or is it 95% and 5% others?) (2) It gives quantitative measure of probabilities of each of a disease state in multiple-diagnosis vectorcardiograms. Probability measures are proportional to some **membership** function measures.

The clusterer described above is performed on a **subset** of the data-base that includes relatively nonempty sets of pure classes and one multiple diagnosis class. **Members** of the multiple diagnosis class are found to be best characterized as being cases with multiple **membership** functions to the adjacent pure classes, rather than being a class of their own.

36/5/13 (Item 1 from file: 2)
DIALOG(R)File 2:INSPEC

6016524 INSPEC Abstract Number: B9810-6150P-037
Title: Virtual network vs. virtual path design for ATM networks
Author(s): Dziong, Z.; Zhang, J.; Mason, L.G.
Author Affiliation: INRS Telecommun., Verdun, Que., Canada
Conference Title: Teletraffic Contributions for the Information Age. Proceedings of the 15th International Teletraffic Congress - ITC 15 Part vol.2 p.1007-18 vol.2
Editor(s): Ramaswami, V.; Wirth, P.E.
Publisher: Elsevier, Amsterdam, Netherlands
Publication Date: 1997 Country of Publication: Netherlands 2 vol. xxxii+1468 pp.
ISBN: 0 444 82598 3 Material Identity Number: XX98-01525
Conference Title: Proceedings of ITC 15 - Fifteenth International Teletraffic Congress
Conference Sponsor: AT&T; Lucent Technol./Bell Labs; NORTEL; Bellcore; BellSouth; Ericsson; GTE
Conference Date: 23-27 June 1997 Conference Location: Washington, DC, USA
Language: English Document Type: Conference Paper (PA)
Treatment: Practical (P); Theoretical (T)
Abstract: In the paper we address the issue of virtual network design in ATM networks. Virtual networks are used as a tool for customization of network management **functions** and for virtual **separation** of network resources. Three **main categories** of virtual network applications can be identified: service, user and management oriented virtual networks. In the **first part** of the paper we compare the design of ATM networks based on allocation of network resources to virtual networks with the one based on allocation of network resources to virtual paths. The comparison, of five different features, indicates that virtual path design involves some inherent contradictions which can be avoided in virtual network design by **separating functions** of the virtual paths from resource allocation. In the **second part** of the paper we concentrate on the design of virtual networks from the resource allocation and topology viewpoint. We propose an optimization procedure that designs the virtual network topology, allocates resources to virtual network links and selects routing parameters. Due to the imposed economic constraints the solution can be achieved by a simple iterative algorithm. Numerical results illustrate good convergence of the algorithm. (11 Refs)
Subfile: B
Descriptors: asynchronous transfer mode; convergence of numerical methods ; iterative methods; network topology; optimisation; telecommunication network management; telecommunication network routing
Identifiers: virtual network; virtual path design; ATM networks; network management **functions** ; network resources; network topology; virtual network links; routing parameters; economic constraints; iterative algorithm; algorithm convergence; resource management cells
Class Codes: B6150P (Communication network design and planning); B0260 (Optimisation techniques); B6210C (Network management)

36/5/14 (Item 2 from file: 2)
DIALOG(R)File 2:INSPEC

6014939 INSPEC Abstract Number: C9810-4240-009
Title: Functional **pearl. Even higher-order** functions **for** parsing ; **or, Why would anyone ever want to use a sixth-order** function ?
Author(s): Okasaki, C.
Author Affiliation: Sch. of Comput. Sci., Carnegie Mellon Univ., Pittsburgh, PA, USA
Journal: Journal of Functional Programming vol.8, pt.2 p.195-9
Publisher: Cambridge University Press,
Publication Date: March 1998 Country of Publication: UK
CODEN: JFPRES ISSN: 0956-7968
SICI: 0956-7968(199803)8:2L.195:FPEH;1-E
Material Identity Number: N848-98004
U.S. Copyright Clearance Center Code: 0956-7968/98/$12.05
Language: English Document Type: Journal Paper (JP)
Treatment: Theoretical (T)
Abstract: A higher-order **function** is a **function** that takes another **function** as an argument or returns another **function** as a result. More specifically, a **first - order function** takes and returns base types, such as integers or lists. A kth-order **function** takes or returns a **function** of order k - 1. Currying often artificially inflates the order of a **function** , so we will ignore all inessential currying. In addition, when calculating the order of a polymorphic **function** , we instantiate all type variables with base types. Under these assumptions, most common higher-order **functions** , such as map and folder, are **second - order** , so beginning **functional** programmers often wonder: What good are **functions** of order three or above? We illustrate **functions** of up to sixth-order with examples taken from a combinator parsing library. Combinator parsing is a classic application of **functional** programming. (6 Refs)
Subfile: C
Descriptors: **functional** programming; program compilers
Identifiers: higher-order **functions** ; parsing; sixth-order **function** ; polymorphic **function** ; map; foldr; combinator parsing; **functional** programming
Class Codes: C4240 (Programming and algorithm theory); C6150C (Compilers, interpreters and other processors)

36/5/20 (Item 8 from file: 2)
DIALOG(R)File 2:INSPEC

03308163 INSPEC Abstract Number: A89026875
Title: The quantum theory of second class **constraints: kinematics**
Author(s): Grundling, H.; Hurst, C.A.
Author Affiliation: Dept. of Math., Australian Nat. Univ., Canberra, ACT, Australia
Journal: Communications in Mathematical Physics vol.119, no.1 p. 75-93
Publication Date: 1988 Country of Publication: West Germany
CODEN: CMPHAY ISSN: 0010-3616
Language: English Document Type: Journal Paper (JP)
Treatment: Theoretical (T)
Abstract: The problem of **second class** quantum constraints is set up in the context of C*-algebras, utilizing the connection with state conditions as given by the heuristic quantization rules. That is, a constraint set is said to be **first class** if all its **members** can satisfy the same state condition, and **second class** otherwise. Several heuristic models are examined, and they all agree with this definition. Given then a **second class** constraint **set** , the authors **separate** out its **first class part** as all those constraints which are compatible with the others, and they propose an algebraic construction for imposition of the constraints. This construction reduces to the normal one when the constraints are **first class** . Moreover, the physical automorphisms (assumed as conserving the constraints) will also respect this construction. (17 Refs)

Subfile: A
Descriptors: algebra; quantisation; quantum theory
Identifiers: quantum theory; **second class** constraints; kinematics; C*-algebras; heuristic quantization rules; algebraic construction; automorphisms
Class Codes: A0365F (Algebraic methods); A0210 (Algebra, set theory, and graph theory)

36/5/28 (Item 16 from file: 2)
DIALOG(R)File 2:INSPEC

00613998 INSPEC Abstract Number: A74019022, B74010886
Title: Separation of the variables in the Klein-Gordon equation
Author(s): Bagrov, V.G.; Meshkov, A.G.; Shapovalov, V.N.; Shapovalov, A.V.
Author Affiliation: Tomsk Polytech. Inst., USSR
Journal: Izvestiya Vysshikh Uchebnykh Zavedenii, Fizika no.12 p. 45-52
Publication Date: 1973 Country of Publication: USSR
CODEN: IVUFAC ISSN: 0021-3411
Translated in: Soviet Physics Journal
Country of Publication: USA
CODEN: SOPJAQ ISSN: 0038-5697
Language: Russian Document Type: Journal Paper (JP)
Treatment: Theoretical (T)
Abstract: All types of external unsteady electro-magnetic field are identified, specified by arbitrary **functions** permitting complete **separation** of the variables in the Klein-Gordon equation with the aid of two **first - order** differential symmetry operators and one **second - order** operator. Curvilinear coordinates are obtained in which the variables separate, and the equation is written in the separated variables. (1 Refs)
Subfile: A B
Descriptors: electromagnetic fields
Identifiers: curvilinear coordinates; separation of variables; Klein Gordon equation; external unsteady EM field identification; differential symmetry operators
Class Codes: A4110 (Classical electromagnetism); B5100 (Electric and magnetic fields)

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Set     Items   Description
S1    1398652   PARSE? OR PARSING OR BREAKOUT OR BREAK()OUT OR SEPARAT? OR
               FRAGMENT? OR CHUNK?
S2       2531   (MARKUP OR XML OR (MARKUP OR MARK()UP)()LANGUAGE? OR HTML -
               OR HTTP OR SGML OR PXML OR PHTML OR PHTTP OR PSGML OR LXML OR
               NXML OR HTML OR SGML OR XHTML OR DHTML OR VRML)(2N)(FILE OR I-
               NFORMATION OR DATA)
S3    3591273   FIRST OR 1ST OR PRIME OR PRIMARY OR INITIAL OR MAIN OR ORI-
               GINAL
S4    7773943   PORTION? OR PART? OR SECTION OR SEGMENT? OR SLICE? OR PIEC-
               E? OR PASS OR CUT
S5         13   (LIGHTWEIGHT OR S3)(2N)PARSER?
S6    5871525   PERFORM? OR CARRY??? OR EXECUT? OR DISCHARG? OR OPERATE? OR
               WORK? OR EXERCISE? OR FUNCTION?
S7       7549   S1 (2N)(TASK? OR FUNCTION? OR ROLE? OR ASSIGNMENT? OR CHOR-
               E? OR DUTY OR DUTIES OR JOB OR JOBS)
S8    1815473   SECOND OR 2ND
S9          6   (HEAVY OR HEAVYWEIGHT OR MAJOR OR S8)(2N)PARSER?
S10   2781207   SET? OR COLLECTION? OR CATEGOR? OR CLASS? ? OR CLASSIFICAT-
               ION OR ORDER
S11   1257347   SUBSET OR MEMBER? OR CONTAIN(2W)SET
S12   1786758   TRANSITION? OR CHANGE OR CHANGING OR PASSAGE OR SHIFT? OR -
               TRANSIT? OR CHANGE
S13         1   S1 AND S2 AND (S3 (3N) S4)
S14     45452   S1 AND (S3 (3N) S4)
S15         1   S1 AND S2 AND (S8 (3N) S4)
S16         0   S13 AND S15
S17     25701   S1 AND (S8 (3N) S4)
S18        77   S6 AND (S3 (3N) S10) AND S7
S19        41   S6 AND (S8 (3N) S10) AND S7
S20      2760   (S3 (3N) S10) AND S11 AND (S8 (3N) S10)
S21      2332   S12 AND (S1 AND (S3 (3N) S4))AND (S1 AND (S8 (3N) S4))
S22         4   S5 AND S9
S23        28   S18 AND S19
S24        10   S20 AND S21
S25        44   S13 OR S15 OR S22 OR S23 OR S24
S26        18   S25 AND IC=G06F?
File 347:JAPIO Nov 1976-2003/Nov(Updated 040308)
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26/5/1 (Item 1 from file: 347)
DIALOG(R)File 347:JAPIO
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07279849 **Image available**
PROCESSING METHOD

PUB. NO.: 2002-148313 [JP 2002148313 A]
PUBLISHED: May 22, 2002 (20020522)
INVENTOR(s): WHETSEL LEE D
APPLICANT(s): TEXAS INSTR INC (TI)
APPL. NO.: 2001-268997 [JP 2001268997]
Division of 02-029369 [JP 9029369]
FILED: February 08, 1990 (19900208)
PRIORITY: 89 308272 [US 89308272], US (United States of America), February 08, 1989 (19890208)
89 308273 [US 89308273], US (United States of America), February 08, 1989 (19890208)
INTL CLASS: G01R-031/28; G01R-031/3185; **G06F-011/22**

ABSTRACT

PROBLEM TO BE SOLVED: To provide a boundary test architecture usable for **executing** a boundary test in an integrated circuit when the integrated circuit is in an operation mode, and especially its processing method.
SOLUTION: This processing method for communicating data from a first register operating at a timing introduced from a serial scanning clock to a second resister operating at a timing introduced from a **functional** clock **separated** from the serial scanning clock comprises a step for operating the first register relative to a **first** time quantity in **order** to load data from a serial test data input lead wire synchronously with the serial scanning clock timing, a step for operating the second resister relative to a **second** time quantity in **order** to load the data from the first register synchronously with the **functional** clock timing, and a step for controlling the step for operating the second resister by an enable signal.

26/5/2 (Item 2 from file: 347)
DIALOG(R)File 347:JAPIO
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06168820 **Image available**
AUTOMATIC EVALUATION STRUCTURE/PARAMETER ADJUSTING DEVICE FOR TOTAL STATE EVALUATION OF PLANT

PUB. NO.: 11-110367 [JP 11110367 A]
PUBLISHED: April 23, 1999 (19990423)
INVENTOR(s): TORIYAMA YOSHIHIRO
WATANABE MITSUHIRO
UEKUSA MAKOTO
APPLICANT(s): FFC KK
FUJI ELECTRIC CO LTD
APPL. NO.: 09-266198 [JP 97266198]
FILED: September 30, 1997 (19970930)
INTL CLASS: **G06F-015/18** ; G05B-013/02

ABSTRACT

PROBLEM TO BE SOLVED: To reduce the burden of a plant operator unskilled in the setting of a fuzzy proposition by selecting and extracting an explanation parameter based on a significant explanation parameter index.

SOLUTION: This device is provided with a **1st - order** adjusting system (fuzzy proposition/ **membership** function/fuzzy measure determining **part**) 10, **2nd - order** adjusting system (G.A. type evaluating structure/parameter adjusting part) 20 and 3rd-order adjusting system (adjustment content collecting **part**) 30. In the **1st - order** adjusting

system 10, a target parameter and its total evaluation system are applied to a time sequential data base (DB) 101 of set plant data, and time sequential signal processing {such as the arithmetic processing of a move average value/tendency value (**change** amount)} 102 is performed by a **separately** set signal processing parameter 111. Then, data to perform total state evaluation (evaluation object data) are **separated** by a threshold value corresponding to the target parameter and by considering only these **separated** evaluation object data, the explanation parameter is determined according to the significant explanation parameter index not to be affected by the relation between the explanation parameters in all the data.

26/5/3 (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX

016020553 **Image available**
WPI Acc No: 2004-178404/200417
XRPX Acc No: N04-141787

Publishing/republishing data **tables in** HTML **documents, by translating selected data into** data **of** HTML **compatible format, while preserving parameters defining format and functionality of data within application program**

Patent Assignee: MICROSOFT CORP (MICT)
Inventor: DAUPHINY J L; JOHNSON R S; LOWRY K R; QUAN M M; SORGE T L
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 6691281	B1	20040210	US 99333816	A	19990615	200417	B

Priority Applications (No Type Date): US 99333816 A 19990615
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 6691281	B1		19	G06F-015/00	

Abstract (Basic): US 6691281 B1

NOVELTY - The method involves using an application program to select the **portion** of **original** data to be published, and translating the selected data into **data** of **HTML** compatible format, while preserving parameters defining format and functionality of data within application program used to create the data and including a unique identifier tag so that all translated data may be readily located within the HTML document.

DETAILED DESCRIPTION - The method further involves automatically inserting the translated original data selection into the HTML document, modifying the original data selection within the application program, to be republished into the HTML document, translating the modified data selection into translated modified **data** of **HTML** compatible format, **parsing** the HTML document until the identifier tag for all of the translated original data that were published is found, and replacing all of the translated original data with all of the translated modified data.

An INDEPENDENT CLAIM is also included for a system for enabling an application program having no HTML editing capability to directly publish a data selection into an HTML document.

USE - For publishing/republishing **data** tables in **HTML** documents while maintaining formatting and functionality for restoring back the data files.

ADVANTAGE - Enables updating of previously exported discreet data section in an HTML document, without changing any other section of HTML document. Ensures that data can be imported from HTML document back into a source application with all the formatting technique to the source application intact.

DESCRIPTION OF DRAWING(S) - The figure is a flowchart illustrating

the logical steps implemented to publish or republish a data table into an HTML document from a source application.
pp; 19 DwgNo 1/5
Title Terms: PUBLICATION; DATA; TABLE; DOCUMENT; TRANSLATION; SELECT; DATA; DATA; COMPATIBLE; FORMAT; PRESERVE; PARAMETER; DEFINE; FORMAT; FUNCTION; DATA; APPLY; PROGRAM
Derwent Class: T01
International Patent Class (Main): **G06F-015/00**
File Segment: EPI

26/5/5 (Item 3 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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015270628 **Image available**
WPI Acc No: 2003-331557/200331
XRPX Acc No: N03-265650
Markup file parsing method involves transitioning parsing of markup file with lightweight parser , to file parsing with heavyweight parser , when transition event occurs
Patent Assignee: BEGED-DOV G (BEGE-I); FROELICH S F (FROE-I)
Inventor: BEGED-DOV G; FROELICH S F
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 20030023615	A1	20030130	US 2001916040	A	20010725	200331	B

Priority Applications (No Type Date): US 2001916040 A 20010725
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 20030023615	A1		15	G06F-007/00	

Abstract (Basic): US 20030023615 A1
NOVELTY - Two different portions of a markup file are respectively parsed with a **lightweight parser** and **heavyweight parser** in a computer system. The lightweight parsing of the file is transitioned to heavyweight parsing of the file, upon occurrence of a transition event.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:
(1) markup file parsing program; and
(2) markup file passing system.
USE - For parsing markup file such as extensible markup language (XML) file received in computer system through Internet, wide area network (WAN), local area network (LAN), etc.
ADVANTAGE - Performs reliable parsing of the markup file, based on ability of the employed parsers, by the transitioning of the file parsing, hence achieving faster parsing of the markup file.
DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of the computer system.
pp; 15 DwgNo 2/8
Title Terms: FILE; PARSE; METHOD; PARSE; FILE; LIGHT; FILE; PARSE; HEAVY; TRANSITION; EVENT; OCCUR
Derwent Class: T01
International Patent Class (Main): **G06F-007/00**
File Segment: EPI

26/5/7 (Item 5 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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014606069 **Image available**
WPI Acc No: 2002-426773/200245
XRPX Acc No: N02-335575
Co-ordinating method for data management operations in a data storage system managed by a set of data management operations concurrently

executing **by task director first and second data management operations with** separate **sets of** tasks
Patent Assignee: INT BUSINESS MACHINES CORP (IBMC); IBM DEUT GMBH (IBMC)
Inventor: ARCHIBALD J E; MCKEEN B D
Number of Countries: 096 Number of Patents: 003
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 200237255	A2	20020510	WO 2001EP11058	A	20010925	200245	B
AU 200215898	A	20020515	AU 200215898	A	20010925	200258	
KR 2003045842	A	20030611	KR 2003705781	A	20030425	200370	

Priority Applications (No Type Date): US 2000703822 A 20001030
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 200237255	A2	E	24	G06F-003/06	
AU 200215898	A			G06F-003/06	Based on patent WO 200237255
KR 2003045842	A			G06F-003/06	

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PH PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW

Abstract (Basic): WO 200237255 A2

NOVELTY - The method involves concurrently **executing** , by a task director, first and second data management operations. The first operation has a **first set** of tasks and the second operation has a **second set** of tasks. The task director controls the **execution** or the non- **execution** of each task of the two sets of tasks based on a set of predetermined rules.

DETAILED DESCRIPTION - In the step of **executing** , the first operation is a different operation a compared to the second operation.

INDEPENDENT CLAIMS are included for a data storage system, for a management device and for a computer program product.

USE - For data storage systems.

ADVANTAGE - Provides for concurrently **executing** data management operations. Reduces time and system resources required for data management operations.

DESCRIPTION OF DRAWING(S) - The figure shows a system for co-ordinating data management operations.

pp; 24 DwgNo 1/4

Title Terms: CO; ORDINATE; METHOD; DATA; MANAGEMENT; **OPERATE** ; DATA; STORAGE; SYSTEM; SET; DATA; MANAGEMENT; **OPERATE** ; CONCURRENT; **EXECUTE** ; TASK; DIRECT; FIRST; SECOND; DATA; MANAGEMENT; **OPERATE** ; SEPARATE; SET; TASK
Derwent Class: T01
International Patent Class (Main): **G06F-003/06**
File Segment: EPI

26/5/9 (Item 7 from file: 350)
DIALOG(R)File 350:Derwent WPIX

014212546 **Image available**
WPI Acc No: 2002-033243/200204
XRPX Acc No: N02-025521
Object-oriented programming for client object, involves obtaining and generating pointer for accessing functionality **of interface from server to client object**
Patent Assignee: MICROSOFT CORP (MICT)
Inventor: FRALEY C L; ZIMMERMAN C A
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week

US 6304918 B1 20011016 US 97815495 A 19970311 200204 B

Priority Applications (No Type Date): US 97815495 A 19970311
Patent Details:
Patent No Kind Lan Pg Main IPC Filing Notes
US 6304918 B1 18 G06F-009/30

Abstract (Basic): US 6304918 B1

NOVELTY - The method involves sending and receiving request from the client object (230) to the server object (200) to query the server object, determining if service objects supports **functionality** then generating a pointer (234) to the query interface (212) in response to identifying steps, which includes defining multiple services each having a unique service indentifier and each including a respective service interface family from which a set of **functionality** is available. The pointer is then return to the client object.

DETAILED DESCRIPTION - The multiple services includes defining a first service whose respective service interface family define a **first set** of **functionality** and defining a second service whose respective service interface family defines a **second set** of **functionality** having no **functionality** in common with the **first set** .

An INDEPENDENT CLAIM is included for a computer-readable medium.

USE - For determining the form of an object's interface as well as the **functionality** of an object's interface in a component object model.

ADVANTAGE - The method provides a query interface call that allows the client object to indicate the desired interface and indicate the context in which implements the requested **functionality** expressed in terms of desired interface. The interface call allows the caller or user of a **functionality** to **separate** the **functionality** from the form of a particular feature when requesting access to the feature.

DESCRIPTION OF DRAWING(S) - The block diagram illustrate the object interface control system.

Server object (200)
Query interface (212)
Client object (230)
Pointer (234)
pp; 18 DwgNo 2/10

Title Terms: OBJECT; ORIENT; PROGRAM; CLIENT; OBJECT; OBTAIN; GENERATE; POINT; ACCESS; **FUNCTION** ; INTERFACE; SERVE; CLIENT; OBJECT
Derwent Class: T01
International Patent Class (Main): **G06F-009/30**
File Segment: EPI

26/5/10 (Item 8 from file: 350)
DIALOG(R)File 350:Derwent WPIX

013965696 **Image available**
WPI Acc No: 2001-449910/200148
XRPX Acc No: N01-332962

Graphics command processor for video graphics data within computer system has parser which receives application commands from memory and produces vertex attributes

Patent Assignee: ATI TECHNOLOGIES INC (ATIT-N)
Inventor: ALEKSIC M; ASARO A; CHAN J C; DOYLE J; LAKSONO I
Number of Countries: 001 Number of Patents: 001
Patent Family:
Patent No Kind Date Applicat No Kind Date Week
US 6184908 B1 20010206 US 9867512 A 19980427 200148 B

Priority Applications (No Type Date): US 9867512 A 19980427
Patent Details:
Patent No Kind Lan Pg Main IPC Filing Notes
US 6184908 B1 13 G06F-015/00

Abstract (Basic): US 6184908 B1

NOVELTY - A **parser** (100) receives **first** application commands from a memory (30), and produces first vertex attributes and renders commands. The **parser** also receives **second** application commands from the memory and produces second vertex attributes while a vertex processor (140) is processing the first vertex attributes.

DETAILED DESCRIPTION - The vertex processor processes the first vertex attributes to produce processed vertex data (146). A buffer (120) is dynamically partitioned based on the latency time of the memory, and includes a first logical buffer to store the application commands (32) and a second logical buffer to store the raw vertex data (34). The vertex processor includes a data requester (142) which requests the transfer of raw vertex data from the memory based on the first vertex attributes. INDEPENDENT CLAIMS are also included for the following:

(a) a computer graphics system;

(b) and a method for rendering graphic images.

USE - For processing video graphics data within computer system.

ADVANTAGE - Ensures efficient rendering of graphic images consisting mosaic of triangular areas. Minimizes latencies associated with graphics command and memory requirements associated with the transfer of information. Minimizes overhead load of CPU.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of a graphics processing system which includes the graphics command processor.

Application commands (32)
Raw vertex data (34)
Parser (100)
Buffer (120)
Vertex processor (140)
Data requester (142)
Processed vertex data (146)
pp; 13 DwgNo 1/6

Title Terms: GRAPHIC; COMMAND; PROCESSOR; VIDEO; GRAPHIC; DATA; COMPUTER; SYSTEM; RECEIVE; APPLY; COMMAND; MEMORY; PRODUCE; VERTEX; ATTRIBUTE
Derwent Class: T01
International Patent Class (Main): **G06F-015/00**
International Patent Class (Additional): G06T-001/00
File Segment: EPI

26/5/11 (Item 9 from file: 350)

DIALOG(R)File 350:Derwent WPIX

012841140 **Image available**
WPI Acc No: 2000-012972/200001
Related WPI Acc No: 1999-580144
XRPX Acc No: N00-010084

Zero overhead computer interrupts with task switching for computer architecture

Patent Assignee: XYRON CORP (XYRO-N)
Inventor: DONOVAN B
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 5987601	A	19991116	US 9738729	A	19970214	200001	B
			US 9823333	A	19980213		

Priority Applications (No Type Date): US 9738729 P 19970214; US 9823333 A 19980213
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5987601	A		13	G06F-009/40	Provisional application US 9738729

Abstract (Basic): US 5987601 A

NOVELTY - The microcomputer comprises multiples of regis- ters multiplexed to communicate with central processing unit (CPU) (1) and register set memory (2). The latches (3,4) for storing register sets being dual addressed to **perform** rapid switching between tasks by reading **first** register **set** simultane- ously with writing **second** register **set** in the same clock cycle.

USE - In computer architecture for the reduction or elimi- nation of interrupt latency and task change processing overhead delays without using software.

ADVANTAGE - Prevents loss of time by eliminating the need to transfer the running task's data to a **separate task** state storage element at instant of interrupt and task change event. Prevents use of part of system's task memory for effective trac- ing of processor flow for full speed, real time use in computer programming debugging. Eliminates need for extensive storage buffers and auxiliary specialized processor with their cost and delays by interrupt and task change mechanism. Eliminates interrupt latency by switching the entire state of the task, which creates deterministic computer architecture. Eliminates portion of previously required CPU pipeline and branch prediction circuits to avoid computer stalls and delays. The system is designed to be simple and compact to be implemented within a CPU and limits fabrication process to reduce energy and cooling requirement and hence avoids wiring and capacitance delays asso- ciated with large register banks. Handle multimedia data rates without significant buffering and its addendent control circuits by interrupt and task change mechanism. No data transfer is required to **separate task** state storage element as the task change mechanism uses one of the task latches as register con- nected to CPU.

DESCRIPTION OF DRAWING(S) - The figure represents the circuit diagram of bit slice of a task register.

CPU (1)
Register set memory (2)
Latches (3,4)
pp; 13 DwgNo 1/7

Title Terms: ZERO; OVERHEAD; COMPUTER; INTERRUPT; TASK; SWITCH; COMPUTER; ARCHITECTURE
Derwent Class: T01
International Patent Class (Main): **G06F-009/40**
File Segment: EPI

26/5/12 (Item 10 from file: 350)
DIALOG(R)File 350:Derwent WPIX

011323005 **Image available**
WPI Acc No: 1997-300909/199728
Portable radio telephone apparatus with memory de- fragmentation function **- identifying first record in first memory, which is adjacent available memory fragment and providing second record in second memory, which is duplicate of** first **record with** set **validity**
Patent Assignee: NOKIA MOBILE PHONES LTD (OYNO)
Inventor: WILLIAMS S H
Number of Countries: 002 Number of Patents: 003
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
GB 2308471	A	19970625	GB 9526458	A	19951222	199728	B
US 5864861	A	19990126	US 96768280	A	19961218	199911	
GB 2308471	B	19991020	GB 9526458	A	19951222	199945	

Priority Applications (No Type Date): GB 9526458 A 19951222
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
GB 2308471	A		19	G06F-012/02	
US 5864861	A			G06F-012/06	
GB 2308471	B			G06F-012/02	

Abstract (Basic): GB 2308[redacted] A

The method involves identifying a first record in a first memory (15), which is adjacent an available memory fragment. A second record is provided in the second memory (17), which is a duplicate of the first record having its validity confirmation indicator set to unconfirmed validity. The validity confirmation indicator of the second record to confirmed validity is set. The validity confirmation indicator of the **first** record is **set** to unconfirmed validity.

A third record is provided, which is a duplicate of the second record, in the first memory device at the location of the available memory fragment having its validity confirmation indicator set to unconfirmed validity. The validity confirmation indicator of the third record i set to confirmed validity. The validity confirmation indicator of the **second** record is **set** to unconfirmed validity.

USE/ADVANTAGE - For memory de-fragmentation in portable telephone apparatus. Allows full recovery when power is restored without any possibility of data loss, even when power supply is removes at any random instant during record relocation.

Dwg.5a-c/6

Title Terms: PORTABLE; RADIO; TELEPHONE; APPARATUS; MEMORY; DE; FRAGMENT; **FUNCTION** ; IDENTIFY; FIRST; RECORD; FIRST; MEMORY; ADJACENT; AVAILABLE; MEMORY; FRAGMENT; SECOND; RECORD; SECOND; MEMORY; DUPLICATE; FIRST; RECORD; SET; VALID

Derwent Class: T01

International Patent Class (Main): **G06F-012/02** ; **G06F-012/06**

International Patent Class (Additional): **G06F-011/14**

File Segment: EPI

26/5/13 (Item 11 from file: 350)

DIALOG(R)File 350:Derwent WPIX

010792171 **Image available**

WPI Acc No: 1996-289124/199630

Related WPI Acc No: 2002-646043; 2002-699957; 2003-292009; 2003-292010

Information retrieval method used with Internet, On-line services - involves including receipt of information organised by profile and topic in mark - up language **and** parsing information **into** portions **of information in** second **language**

Patent Assignee; SUN MICROSYSTEMS INC (SUNM)

Inventor: HOOPER P J; MESKE C F; OPPERMAN M R

Number of Countries: 008 Number of Patents: 007

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
EP 718783	A1	19960626	EP 95309279	A	19951220	199630	B
US 5530852	A	19960625	US 94361992	A	19941220	199631	
JP 9006667	A	19970110	JP 95348575	A	19951220	199712	
US 5784608	A	19980721	US 94361992	A	19941220	199836	
			US 96667651	A	19960621		
US 5953732	A	19990914	US 94361992	A	19941220	199944	
			US 96667651	A	19960621		
			US 97967739	A	19971110		
EP 718783	B1	20020828	EP 95309279	A	19951220	200264	
			EP 200276589	A	19951220		
			EP 200276590	A	19951220		
			EP 200276591	A	19951220		
DE 69527926	E	20021002	DE 627926	A	19951220	200273	
			EP 95309279	A	19951220		

Priority Applications (No Type Date): US 94361992 A 19941220; US 96667651 A 19960621; US 97967739 A 19971110

Cited Patents: 4.Jnl.Ref

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 718783	A1	E	31	G06F-017/30	

Designated States (Regional): DE FR GB IT NL SE

US 5530852	A	27			
JP 9006667	A	20	G06F-012/00		
US 5784608	A		G06F-017/30	Cont of application US 94361992 Cont of patent US 5530852	
US 5953732	A		G06F-017/30	Cont of application US 94361992 Cont of application US 96667651 Cont of patent US 5530852 Cont of patent US 5784608	
EP 718783	B1 E		G06F-017/30	Related to application EP 200276589 Related to application EP 200276590 Related to application EP 200276591	
Designated States (Regional): DE FR GB IT NL SE					
DE 69527926	E		G06F-017/30	Based on patent EP 718783	

Abstract (Basic): EP 718783 A

The method involves receiving a first file of information which includes a first mark-up language to identify contents of the information. In response to receiving the information, the first file is **parsed** to generate a list of profiles with corresponding topic. A second file is generated in a second mark-up language containing the list of the profiles and corresponding files in a third mark-up language for the corresponding topics.

The second file contains anchors referencing each corresponding third file. First mark-up instances in the first file are converted to second mark-up instances in either the second file or the third file. The first file of information is **parsed** to determine the articles for corresponding topics. A fourth file includes a brief of each article in the first file of information and an anchor to the fifth file. The fifth file includes text for the articles, if any, for the corresponding topics.

ADVANTAGE - Easier to obtain information from various sources.

Dwg.4/13

Title Terms: INFORMATION; RETRIEVAL; METHOD; LINE; SERVICE; RECEIPT; INFORMATION; ORGANISE; PROFILE; TOPIC; MARK; UP; LANGUAGE; **PARSE** ; INFORMATION; PORTION; INFORMATION; SECOND; LANGUAGE

Derwent Class: T01

International Patent Class (Main): **G06F-012/00** ; **G06F-017/30**

International Patent Class (Additional): **G06F-017/21**

File Segment: EPI

26/5/14 (Item 12 from file: 350)

010286145 **Image available**

WPI Acc No: 1995-187404/199525

Related WPI Acc No: 1999-396713

XRPX Acc No: N95-146772

Parallel processing for single processor system - has arithmetic and logic units of processor operating on half words in parallel or whole words sequentially giving parallelism for half words

Patent Assignee: HEWLETT-PACKARD CO (HEWP)

Inventor: BEI-LOH L R; BEI-LOH LEE R; BEI-LOH-LEE R; LEE R B

Number of Countries: 005 Number of Patents: 006

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
EP 654733	A1	19950524	EP 94110410	A	19940705	199525	B
JP 7200260	A	19950804	JP 94312671	A	19941122	199540	
US 5636351	A	19970603	US 93157346	A	19931123	199728	
			US 95390908	A	19950217		
EP 654733	B1	20000524	EP 94110410	A	19940705	200030	
			EP 99107195	A	19940705		
DE 69424626	E	20000629	DE 624626	A	19940705	200038	
			EP 94110410	A	19940705		
EP 924601	B1	20010926	EP 94110410	A	19940705	200157	
			EP 99107195	A	19940705		

Priority Applications (No Type Date): US 93157346 A 19931123; US 95390908 A 19950217
Cited Patents: EP 239899; EP 395348; EP 577483; GB 2172129; GB 2215496
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 654733	A1	E	27	G06F-009/302	
Designated States (Regional): DE FR GB					
JP 7200260	A		21	G06F-007/50	
US 5636351	A		23	G06F-007/42	Cont of application US 93157346
EP 654733	B1	E		G06F-009/302	Related to application EP 99107195 Related to patent EP 924601
Designated States (Regional): DE FR GB					
DE 69424626	E			G06F-009/302	Based on patent EP 654733
EP 924601	B1	E		G06F-007/48	Div ex application EP 94110410 Div ex patent EP 654733
Designated States (Regional): DE FR GB					

Abstract (Basic): EP 654733 A

The processing unit includes an ability to operate on half words. The processor provides normal operations for data of its normal length. Additionally, the processor can operate on half length words in parallel. Each functional unit of the processor e.g. a multiplier, a **shifter** and an adder, is partitioned. One portion (41) operates on the low order bits of data words and accepts two low order bit operators (42,43) to produce an output (44).

Similarly another partition (51) operates on higher order bits. A control line (49) and selector (50) optionally allow the units to operate **separately** or jointly.

ADVANTAGE - Provides significant speed advantages where half word operations are possible. No extra space required on processor chip. No increase in design complexity.

Dwg.2/11

Title Terms: PARALLEL; PROCESS; SINGLE; PROCESSOR; SYSTEM; ARITHMETIC; LOGIC; UNIT; PROCESSOR; OPERATE; HALF; WORD; PARALLEL; WHOLE; WORD; SEQUENCE; PARALLEL; HALF; WORD
Derwent Class: T01
International Patent Class (Main): **G06F-007/42 ; G06F-007/48 ; G06F-007/50 ; G06F-009/302**
International Patent Class (Additional): **G06F-007/00 ; G06F-007/44 ; G06F-007/52 ; G06F-009/38**
File Segment: EPI

26/5/15 (Item 13 from file: 350)
DIALOG(R)File 350:Derwent WPIX

008646294 **Image available**
WPI Acc No: 1991-150323/199121
XRPX Acc No: N91-115429

Helical scanning computed tomography system - reduces image artifacts that result from acquiring tomographic projection data in helical scan

Patent Assignee: GENERAL ELECTRIC CO (GENE)
Inventor: CRAWFORD C R; KING K F
Number of Countries: 006 Number of Patents: 006
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
EP 428348	A	19910522	EP 90312285	A	19901109	199121	B
US 5233518	A	19930803	US 89435980	A	19891113	199332	
EP 428348	A3	19920701	EP 90312285	A	19901109	199333	
IL 96212	A	19930922	IL 96212	A	19901102	199349	
EP 428348	B1	19970423	EP 90312285	A	19901109	199721	
DE 69030555	E	19970528	DE 630555	A	19901109	199727	
			EP 90312285	A	19901109		

Priority Applications (No Type Date): US 89435980 A 19891113

Cited Patents: NoSR.Pub; [redacted]nl.Ref; EP 124015; EP 450152; [redacted]8800321; US 4707822
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 428348	A				
Designated States (Regional): DE FR GB NL					
US 5233518	A		11	G06F-015/00	
EP 428348	B1	E	16	G06T-011/00	
Designated States (Regional): DE FR GB NL					
DE 69030555	E			G06T-011/00	Based on patent EP 428348
IL 96212	A			G01T-001/166	

Abstract (Basic): EP 428348 A

The system divides 360 deg. of projection data into two half scans. **Separate** weighting **functions** are applied to the two half scans and they are constructed to an image.

The weighting **functions** provide effective interpolation and extrapolation of the half scan data to a slice plane centred in the projection data. The weighting **functions** are feathered with a cubic **function** to remove weighting induced image artifacts.

ADVANTAGE - Permits acquisition of projection data for a single slice image over shorter Z-axis distance and shorter time period. (14pp Dwg.No.3/5

Title Terms: HELICAL; SCAN; COMPUTATION; TOMOGRAPHY; SYSTEM; REDUCE; IMAGE; ARTIFACT; RESULT; ACQUIRE; TOMOGRAPHY; PROJECT; DATA; HELICAL; SCAN
Derwent Class: P31; S03; S05; T01
International Patent Class (Main): G01T-001/166; **G06F-015/00** ; G06T-011/00
International Patent Class (Additional): A61B-006/03; **G06F-015/42** ; **G06F-015/62**
File Segment: EPI; EngPI

26/5/16 (Item 14 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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007858478 **Image available**
WPI Acc No: 1989-123590/198917
XRPX Acc No: N89-094222

ESDI interface control circuit - uses parallel loaded shift register with control bits associated with each data word to control transmission and reception

Patent Assignee: BULL HN INFORMATION SYSTEMS INC (HONE); HONEYWELL BULL ITAL SPA (HONE)
Inventor: BOIOLI R; TAGLIABUE P
Number of Countries: 005 Number of Patents: 005
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
EP 307794	A	19890322	EP 88114667	A	19880908	198917	B
US 4910705	A	19900320	US 88230560	A	19880810	199017	
IT 1222663	B	19900912	IT 8721918	A	19870916	199219	
EP 307794	B1	19920715	EP 88114667	A	19880908	199229	
DE 3872807	G	19920820	DE 3872807	A	19880908	199235	
			EP 88114667	A	19880908		

Priority Applications (No Type Date): IT 8721918 A 19870916
Cited Patents: 1.Jnl.Ref; JP 59100630; US 3999163; US 4279033; US 4509113
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 307794	A	E	12		
Designated States (Regional): DE FR GB					
EP 307794	B1	E	13	G06F-003/06	
Designated States (Regional): DE FR GB					
DE 3872807	G			G06F-003/06	Based on patent EP 307794
IT 1222663	B			G06F	

Abstract (Basic): EP 307794 A

The Enhanced Small Device Interface (ESDI) control circuit comprises a shift register parallel loaded with a 17-bit binary code and with two control bits, the parallel load command setting a control flip-flop and a timing circuit which clocks the dialogue as long as the control flip-flop is set, causing the register to serially unload and the serial loading of the register with the control bit until, when code transfer is complete, the control bit level is inverted, causing reset of the control flip-flop. If transmission is to be followed by reception, the timing unit is held active and the binary code is serially loaded until the control bit, with inverted logic level, appears at a preset register output and stops the dialogue, the serially loaded binary code then being available for parallel read out.

USE/ADVANTAGE - Serial connector which uses small number of connecting wires for use with, for example, disc controllers.

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Title Terms: INTERFACE; CONTROL; CIRCUIT; PARALLEL; LOAD; SHIFT; REGISTER; CONTROL; BIT; ASSOCIATE; DATA; WORD; CONTROL; TRANSMISSION; RECEPTION
Derwent Class: T01
International Patent Class (Main): **G06F-003/06 ; G06F-020/10**
International Patent Class (Additional): **G06F-007/00 ; G06F-013/42**
File Segment: EPI

26/5/17 (Item 15 from file: 350)
DIALOG(R)File 350:Derwent WPIX

007066670
WPI Acc No: 1987-066667/198710
XRPX Acc No: N87-050614
Data processing system esp. for borehole logging - has separate processing task executed by dedicated CPU or by one or more shared processing units
Patent Assignee: PRAD RES & DEV NV (PRAD-N); SCHLUMBERGER LTD (SLMB); SOC PROSPECTION ELEC SCHLUMBERGER (SLMB); SCHLUMBERGER TECHNOLOGY CORP (SLMB)
Inventor: BARSTOW D; BARTH P; GUTHERY S; BARSTOW D R; BARTH P S; GUTHERY S B
Number of Countries: 011 Number of Patents: 010
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
EP 214037	A	19870311	EP 86401800	A	19860812	198710	B
BR 8603855	A	19870324				198715	
NO 8603125	A	19870316				198717	
DK 8603981	A	19870221				198720	
CN 8605110	A	19870701				198837	
ES 2001537	A	19880601	ES 861174	A	19860819	198922	
US 5204965	A	19930420	US 85767409	A	19850820	199317	
			US 87135546	A	19871218		
			US 89409969	A	19890919		
NO 173575	B	19930920	NO 863125	A	19860801	199343	
EP 214037	B1	19951004	EP 86401800	A	19860812	199544	
DE 3650411	G	19951109	DE 3650411	A	19860812	199550	
			EP 86401800	A	19860812		

Priority Applications (No Type Date): US 85767409 A 19850820; US 87135546 A 19871218; US 89409969 A 19890919
Cited Patents: A3...9020; EP 101158; No-SR.Pub; US 4128882; US 4153932
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 214037	A	E	25		
Designated States (Regional): DE FR GB IT NL					
US 5204965	A		24	G06F-015/82	Cont of application US 85767409 Cont of application US 87135546
NO 173575	B			G06F-015/20	Previous Publ. patent NO 8603125
EP 214037	B1	E	30	G06F-017/40	

Designated States (Regional): DE FR GB IT NL
DE 3650411 G G06F-017/40 Based on patent EP 214037

Abstract (Basic): EP 214037 A

An input unit receives sequentially occurring data items to be processed with a processor concurrently **executing** a no. of processes to associate data items with respective unique index values according to the source of each item and its sequential position relative to other items received from the same source.

A memory is provided to store the data items and the system **operates** to supply a selected item from the memory to the processor for use in **execution** of a process, the item having an index value corresp. to the no. of items received from the source of that item. An output unit supplies items resulting from **execution** of the processes.

ADVANTAGE - Facilitates implementation of time-independent and time-dependent operations jointly.

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Title Terms: DATA; PROCESS; SYSTEM; BOREHOLE; LOG; SEPARATE; PROCESS; TASK; **EXECUTE** ; DEDICATE; CPU; ONE; MORE; SHARE; PROCESS; UNIT
Derwent Class: Q49; S03; T01; X25
International Patent Class (Main): **G06F-015/20** ; **G06F-015/82** ; **G06F-017/40**
International Patent Class (Additional): E21B-044/00; E21B-047/00; G01V-001/28; G01V-003/00; **G06F-009/44** ; **G06F-009/46** ; **G06F-015/74**
File Segment: EPI; EngPI

26/5/18 (Item 16 from file: 350)
DIALOG(R)File 350:Derwent WPIX

004205971
WPI Acc No: 1985-032851/198506
XRPX Acc No: N85-024409

Terrain elevation correlator and detector for aircraft navigation - correlates measured terrain data with reference elevation stored in digital map generator

Patent Assignee: HARRIS CORP (HARO)
Number of Countries: 004 Number of Patents: 005
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
DE 3424034	A	19850131	DE 3424034	A	19840629	198506	B
GB 2144007	A	19850220	GB 8416473	A	19840628	198508	
US 4584646	A	19860422	US 83509052	A	19830629	198619	
GB 2144007	B	19870114				198702	
CA 1216918	A	19870120				198708	

Priority Applications (No Type Date): US 83509052 A 19830629
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
DE 3424034	A		31		

Abstract (Basic): DE 3424034 A

A signal generator produces signals representing measured terrain elevation at the geographical position of the aircraft. A correlator processes the signals in the frequency plane with signals representing the elevation of several surrounding geographical positions. The correlator produces signals representing error estimates of the positional data provided by the navigation system. One of the signals is then fed to the latter to update the aircraft control data.

Pref. the measured elevation signals are subjected to a discrete cosine transformation **function** , and the surrounding position elevations are obtained using a digital map generator.

USE/ADVANTAGE - E.g for use in helicopter. Two-dimensional positional error estimate.

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Title Terms: TERRAIN; ELEVATE; CORRELATE; DETECT; AIRCRAFT; NAVIGATION;

CORRELATE; MEASURE; TER[redacted]N; DATA; REFERENCE; ELEVATE; S[redacted]RAGE; DIGITAL; MAP; GENERATOR

Derwent Class: S02; T06; W06

International Patent Class (Additional): G01C-021/20; G01S-001/04; G05D-001/04; **G06F-015/50** ; G06G-007/70

File Segment: EPI